

10/518133

PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING

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PCT

전하사/2004.12.14

WRITTEN OPINION

(PCT Rule 66)

To:

KIM, Bong-Hee

2F, Daeho Building, 1502-12, Seocho3-dong, Seocho-gu,  
Seoul 137-870, Republic of KOREA

Date of mailing  
(day/month/year) 20 JULY 2004 (20.07.2004)

Applicant's or agent's file reference  
EMW9644

REPLY DUE within 2 months from  
the above date of mailing

International application No.

PCT/KR2002/001212

International filing date (day/month/year)

25 JUNE 2002 (25.06.2002)

Priority date(day/month/year)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H01Q 1/24

Applicant

E.M.W.ANTENNA CO., LTD. et al

1. This written opinion is the first (first,etc.) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When ? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d)

How ? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3  
For the form and the language of the amendments, see Rules 66.8 and 66.9

Also For an additional opportunity to submit amendments, see Rule 66.4  
For an examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis  
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 15 OCTOBER 2004 (15.10.2004)

Name and mailing address of the IPEA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JEON, Ki Eock

Telephone No. 82-42-481-5469



**I. Basis of the opinion****1. With regard to the elements of the international application:\***☒ the international application as originally filed☐ the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, as amended (together with any statement) under Article 19

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**These elements were available or furnished to this Authority in the following language English which is☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☒ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:**☐ contained in the international application in printed form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4. ☐ The amendments have resulted in the cancellation of:**☐ the description, pages \_\_\_\_\_☐ the claims, Nos. \_\_\_\_\_☐ the drawings, sheet/fig \_\_\_\_\_**5.**☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

**WRITTEN OPINION**

International application No.

PCT/KR2002/001212

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

|                               |        |                 |     |
|-------------------------------|--------|-----------------|-----|
| Novelty (N)                   | Claims | 1-16            | YES |
|                               | Claims | None            | NO  |
| Inventive step (IS)           | Claims | 1-9,11-12,14-15 | YES |
|                               | Claims | 10,13,16        | NO  |
| Industrial applicability (IA) | Claims | 1-16            | YES |
|                               | Claims | None            | NO  |

**2. Citations and explanations**

Claims 10, 13 and 16 of the present invention relate to a multiple band type antennas. Compared to the cited document(US 5861859), the components comprised of a first helical antenna, a covering material, a whip antenna and a third helical antenna are partly similar. Therefore, it is easy to arrive at the invention. Accordingly, Claims 10, 13 and 16 of the present invention do not meet the requirements of Article 33(3) PCT.